

Nature Connections

News and Events from the Missouri Department of Conservation • November/December 2016



Managing Missouri's Deer Herd And Fighting CWD

The weather is getting cooler and the leaves are beginning to fall, my favorite time of year is finally here—deer season! This year, there are new regulations and Telecheck requirements that hunters need to be aware of before they take to the field. These changes will help effectively manage Missouri's ever-changing deer herd. The following information outlines the changes to the Telecheck system as well as an update on the Missouri Department of Conservation's (MDC) efforts to monitor and combat Chronic Wasting Disease (CWD) in southwest Missouri.

Four questions are being added to the Telecheck system.

If a doe is harvested, the hunter will be asked if the distance from the corner of the eye to the edge of the nostril is greater than 4.5 inches. This measurement will determine if the doe is a fawn or an adult deer 1.5 years old or older.



If an antlered buck is harvested, the hunter will be asked if the circumference 1 inch above the base of either antler is greater than 2.5 inches. This measurement will determine whether the buck is a yearling or an adult deer 2.5 years old or older (button bucks



will not apply since they are a known age animal). This new age at harvest data is being used to build a new "Statistical Population Reconstruction" model. The goal is to apply this new model to the 11 designated regions across Missouri to better track harvest trends and the growth in population through reproduction. Eventually the model is to be used at a county level to accurately measure and predict deer populations as well as the various ages within the herds.

Also new for this year is the use of crossbows during archery season; therefore, Telecheck will now ask whether a crossbow was used to harvest the deer. This information will help determine the impact crossbows have on the number of deer taken during the archery portion of the season.

Finally, Telecheck will ask every successful deer hunter whether their deer was taken on public or private land. This question, along with the county information already obtained by Telecheck, will provide valuable information to managers of MDC areas and allow for a more fine-tuned approach to managing deer numbers on each area.

One of the largest projects MDC has taken on in recent memory is the effort to collect samples for CWD testing in the north, central, and eastern CWD zones during the opening weekend (November 12 and 13) of the November firearms season. MDC personnel will be staffing 75 stations across 29 counties to make this effort a success. It is hoped that 15,000–20,000 samples could be collected during the two-day effort.

Here in southern Missouri, a new "southern" monitoring area consisting of McDonald, Barry,

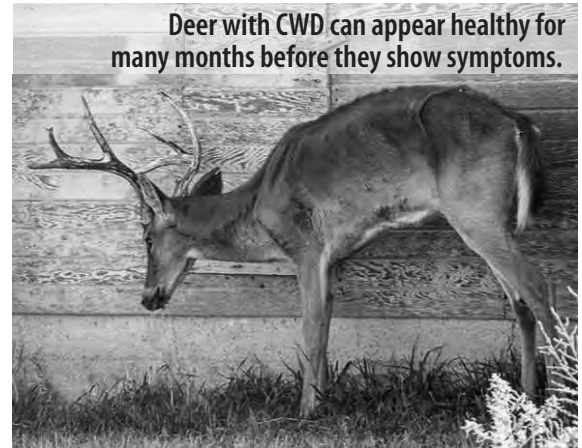


Photo Courtesy of Mike Hopper, Kansas Department of Wildlife, Parks and Tourism.

Stone, Christian, Taney, Douglas, and Ozark counties has been defined. Voluntary sampling at approximately two deer processors per county will also take place during the November 12 and 13 opening weekend of firearms season. This effort is in response to the discovery of CWD in northern Arkansas in early 2016. To date, over 90 CWD-positive animals have been identified in northern and west-central Arkansas. There is no known cure for CWD, but evidence suggests that the rate at which it spreads can be reduced by identifying the location of infected animals and reducing the deer density in that area.

The white-tailed deer in Missouri are one of our many great treasures. We must all do our part to conserve them and ensure that our herd is healthy for future generations to enjoy as much as we do. The collection of data through the Telecheck system as well as the large effort we are making to stop the spread of CWD are part of what must be done to make sure that happens. Good luck hunting this fall and stay safe!

—Nick Burrell, Wildlife Management Biologist

The Springfield Conservation Nature Center **trails** will be closed **Saturday, December 10, through Monday, December 12**, for a managed archery deer hunt. See the article on page 7 for more information.

Joplin Office in the Wildcat Glades Conservation & Audubon Center

201 W. Riviera Drive, Suite B, Joplin, MO 64804 • mdc.mo.gov/wildcat



The Joplin Conservation Office, located in the Wildcat Glades Conservation & Audubon Center, is your local connection to Missouri's fish, forests, and wildlife. Stop by and purchase hunting and fishing permits, attend a nature program, go for a hike, enjoy a picnic, or access Shoal Creek. Within the 190 acres of Wildcat Park, you will find a diverse mix of wildlife habitats rich with flora and fauna. From I-44, take exit 6, and turn south on MO-86. Turn right on Riviera Drive to enter Wildcat Park.

JOPLIN OFFICE HOURS:

Monday–Friday: 8 AM–5 PM
Closed all state holidays.

AUDUBON CENTER HOURS:

Tuesday–Saturday: 9 AM–5 PM

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-629-3423** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

Kids' Christmas Bird Count

January 7 • Saturday • 9 AM–1 PM at the Wildcat Glades Conservation & Audubon Center (Joplin) *Registration required, call 417-782-6287 (ages 7–17)*

Kids, enjoy a morning just for you and the birds. Discover the excitement of bird watching in the tradition of the annual *Christmas Bird Count*. Participants will learn birding and binocular basics in the classroom before heading outside for the bird count. Experienced birders from the Ozark Gateway Audubon Society Chapter, Missouri Audubon, and staff will lead mentored birding experiences with the participants. The morning will end with a tally of total birds observed and a special thanks to the Ozark Gateway Audubon Society for providing awards and lunch for all. Remember to dress for the weather and be prepared for a moderate-rated hike.

Getting kids to discover birding can be the open door to a lifelong love and appreciation of nature. Birds can be found all around us. Their brilliant colors and entertaining behavior will capture the attention of any young naturalist. Chickadees, cardinals, and woodpeckers will provide the entertainment; all that is needed is a little encouragement and enthusiasm from a parent or mentor. Check out the details above for the *Kids' Christmas Bird Count*. It connects kids with nature and birds by making memories that cannot be found in books or videos.

November, December, and January Events

Tree Pruning Workshop

November 3 • Thursday • 6:30–8 PM
New-Mac Electric Coop Meeting Room
9 Mustang Dr. (Anderson)

November 8 • Tuesday • 6:30–8 PM
Aurora City Fire Dept. Meeting Room
106 S. Elliot Ave. (Aurora)

November 15 • Tuesday • 6:30–8 PM
Wildcat Glades Conservation & Audubon Center (Joplin)

Registration is not required but is requested (ages 16–adult)

Properly guiding a young tree with pruning will help it develop a desirable shape and improve long-term health. Classes will cover basic tree biology, why to prune trees, and proper pruning techniques. Older trees often only need light pruning to remove dead branches and poor structure. Learn the techniques by attending one of the *Tree Pruning Workshops* near you.

Hands-On Tree Pruning Workshops

Registration is requested (ages 16–adult)

November 5 • Saturday • 9 AM–12 NOON
Hosted by the Missouri Community Forestry Council—do hands-on pruning in Parr Hill Park. Meet at the shelter near the parking lot at the corner of 18th Street and Kansas Avenue (Joplin).

November 19 • Saturday • 10 AM–12 NOON
Hosted by the Carthage Tree Board—do hands-on pruning in Municipal Park. Meet north of pool (Carthage).

Short-eared Owl Hike

December 10 • Saturday • 4:30–6 PM
Shawnee Trail Conservation Area
(near Mindenmines)

Registration required (ages 8–adult)

Short-eared owls put on aerial displays over our native grasslands every winter. Discover these and other raptors, waterfowl, and feathery friends as we explore and enjoy a winter sunset with these uncommon winter residents! Bring the family and dress for the weather for this easy-rated hike.

Annual Joplin Area Christmas Bird Count

December 17 • Saturday • 8 AM–12 NOON
Wildcat Glades Conservation & Audubon Center (Joplin)

Registration required, call 417-782-6287

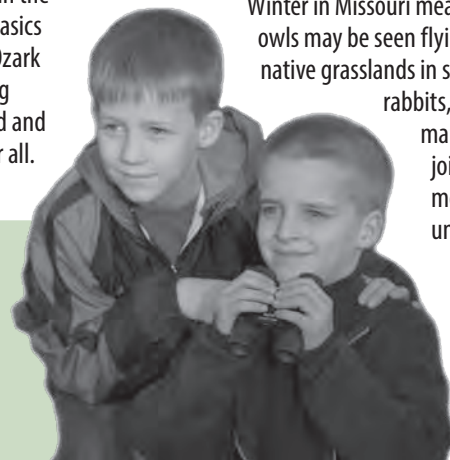
Join in the fun and participate in this citizen science event. The Christmas Bird Count data collected by observers during this annual bird count allows researchers, conservation biologists, and interested individuals to study the long-term health and status of bird populations across North America. Led by experienced birders, participants will follow specified routes through a designated 15-mile diameter circle, counting every bird they see or hear. Results will then be compiled and posted online at www.audubon.org in January. This event is sponsored by the Ozark Gateway Audubon Society. Area routes will be assigned and individuals who are new to birding are welcome to carpool with experienced birders.

Short-eared Owl Hike

January 7 • Saturday • 4:30–6 PM
Shawnee Trail Conservation Area
(near Mindenmines)

Registration required (ages 8–adult)

Winter in Missouri means short-eared owls may be seen flying low over native grasslands in search of mice, rabbits, and other small mammals. Come join us to discover more about these uncommon winter residents! Bring the family and dress for the weather for this easy-rated hike.



Andy Dalton Shooting Range and Outdoor Education Center

4897 N. Farm Road 61, Ash Grove, MO 65604 • mdc.mo.gov/andydalton

Deer Rifle Sight-In Days



No registration required and regular range usage fees apply

Beginning October 29, we will be open every day through November 11 from 9 AM until 4:30 PM so hunters can use the shooting range for sighting in their deer rifles. A bore sighting system is available for loan to help save on your ammunition costs.

October 29–November 11 • Daily • 9 AM–4:30 PM

Are You Ready For Deer Season?

The nights are getting cooler, the trees are changing color, and the smell of fall is in the air. For most people these are signs autumn is here. Folks are ready to make apple and pumpkin pies and families are raking leaves in their yards and focusing on the upcoming holidays. For others it means time to make a trip to their local shooting range. For some it's about going out into the woods and sitting for hours waiting for that big buck to walk out in front of them. For those who prepared properly for that big moment, there is nothing that feels better than being able to bring home that buck. For those who do not prepare, they feel like the world is working against them. Here are some quick and easy tips for making sure you are ready for the big moment.

Scope mounts: While having a good scope is a great accessory to your gun, the scope will not be of much use if it moves every time you shoot the firearm. Double-check the scope mounts and make sure all of the screws are tight and in place and that the scope mounts are the right mounts for your scope.

Bore sight: To save time and ammunition when you first get to the range, use a bore sighting system to adjust the scope on your rifle. Bore sighting your rifle means you are making sure the crosshairs are aligned with where you want to hit on your target. Though bore sighting is not a sure thing, it can save you time, ammunition, and bring you closer to your goal of a quick, clean kill.

Shooting: After using a bore sighting system to line up your sights, set your target at 25 yards. Using a shooting rest, aim for one spot on your target and shoot three times. After your shots, look at your scope to see how to adjust it accordingly. On your next group of shots, aim for the same place. Once you have zeroed it in at the 25-yard line, start moving it back 25 yards at a time, re-zeroing it each 25 yards until you reach the yardage that you would like to set for your sights.

Ammunition: When planning your trip to the shooting range, make sure you have the correct ammunition for your firearm. Check on the ammunition itself to make sure it matches both the barrel and the box. It's a good idea to practice shooting with the ammunition that you plan to use. There are several different kinds available for different calibers of rifles. Try a variety to find what type your rifle fires best.

Shooting: After finding the ammunition that works best with your rifle and zeroing it in, practice shooting the way you will be shooting in the field. If you plan on using a bipod or tripod when you hunt, take it with you to the range and shoot a few rounds with it.

Deer kill zone: Keep in mind when you have a perfect broadside shot on a deer, your kill zone will be a circle about 8 to 9 inches in diameter. However, if the deer is quartering away from you, the kill zone shrinks by half and changes from a circle to an oval in shape.

Scout: Check out the area you plan to hunt before opening week. Look for signs that there are deer in or around the area. Identify shooting lanes based on where you will be shooting and facing. Make sure you know your target and surroundings. This is crucial before taking the safety off and shooting your firearm.

Check rules and regulations: Changes in rules and regulations can happen yearly. Make sure you know what has changed and how to apply the new regulations.

—Ali Underwood, Resource Assistant

Holiday Closings: Thanksgiving, Christmas, and New Year's Days



To get to the Andy Dalton Shooting Range and Outdoor Education Center, take US Highway 160 west of Willard, turn south on Farm Road 61, and go 2.5 miles, facility on the west side of road. Facilities include an outdoor education center and archery, rifle, pistol, and shotgun ranges, including skeet and trap.

HOURS:

September 14–April 14

Monday and Thursday: 9 AM–4:30 PM

Friday–Sunday: 12 NOON–4:30 PM

April 15–September 13

Monday: 9 AM–4:30 PM

Thursday: 9 AM–7:30 PM

Friday–Sunday: 12 NOON–4:30 PM

Closed Tuesdays, Wednesdays and all state holidays. Hours are subject to change.

FACILITIES AND FEES:

Available for individual and group use. Call for information and possible restrictions.

- Rifle/pistol range fee: \$3 per booth per hour
- Trap/skeet range fee: \$3 per person per round of 25 clay targets
- Shotgun patterning range: \$3 per person per hour
- Archery range: \$3 per person per hour
- Group use fee: \$20 per hour plus \$3 per round of 25 clay targets

TO REGISTER FOR A PROGRAM:

Programs are free. Call 417-742-4361 or email [<DaltonRange@mdc.mo.gov>](mailto:DaltonRange@mdc.mo.gov) to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/springfield



The Springfield Conservation Nature Center is located in southeast Springfield just west of US-65 off the James River Freeway (US-60). Indoors, enjoy nature exhibits, attend programs, purchase hunting and fishing permits, browse through a nature-related gift shop, and pick up free conservation brochures. Outdoors, enjoy three miles of hiking trails through a variety of natural communities. Call to schedule a naturalist-led program for your organized group.

CURRENT HOURS:

November 1–February 29

Building: Tuesday–Saturday: 8 AM–5 PM
Closed Sunday and Monday
Closed all state holidays

Trails: Sunday–Saturday: 8 AM–6 PM

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-888-4237** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

Little Acorns

Programs are 45-minutes in length

Registration begins November 1 (ages 3–6)

Foxes In The Fields And Forests

November 18 • Friday • 10 AM OR 11:15 AM

November 19 • Saturday • 11 AM

Which fox lives in the fields? Which lives in the forests? Pounce on this program to find out facts about fox families. Make a fox “face” to take home.

Wonderful Whitetails

November 30 • Wednesday • 10 AM OR 11:15 AM

We all know Bambi but what do you know about real deer? Where do they live? What do they eat? Come in for some antler-related antics and learn some of the wonders of the whitetails.

Managing Urban Deer Populations



**November 3
Thursday
7–8:30 PM**

*Registration begins October 15
(ages 10–adult)*

scientific data and strategies for keeping deer populations healthy within the city of Springfield. Those strategies include the Springfield bowhunting ordinance, managed hunts on City Utilities properties, and a new archery only managed hunt, administered by the Missouri Department of Conservation, at the nature center December 10–12.

Seeing deer in urban areas used to be unusual but now it can be an everyday occurrence. Healthy deer populations require management and that means finding balance. Too few deer decreases the opportunity to see one in the wild and too many deer create issues for both deer and people including habitat destruction and an increase in deer-vehicle collisions and more disease in deer populations. Urban Wildlife Biologist Ashley Schnake shares the latest

November Events

Story Time With Ms. Ladybug

November 9 • Wednesday • 11–11:30 AM

No registration required (ages 2–6)

Join Volunteer Naturalist Joyce Tolliver as she reads a nature story and shares activities with your 2–6 year olds. Please, no organized groups.

Nature And The Arts—The Photography Of Noppadol Paothong

November 18 • Friday • 7–8:30 PM

Registration begins October 15 (ages 12–adult)

Enjoy an evening with the Missouri Department of Conservation’s award-winning photographer Noppadol Paothong as he returns to share his “Works In Progress” photography and 25 years of conservation successes. Nop’s stories and awe-inspiring photography instill a deep sense of wonder for Missouri’s outdoor world.

Take A Hike

November 19 • Saturday • 8:30 AM–2 PM

Registration begins November 1 (ages 18–adult)

Explore the Homesteaders Trail on the Henning Conservation Area with Volunteer Naturalist Pat Stritzel. Meet at the nature center and carpool. Bring a sack lunch and water and wear comfortable hiking shoes. **Hike is approximately 4 miles and rated moderate to difficult.**

The nature center **building** will be closed on Friday, November 11, in observance of Veterans Day.

The trails will remain open.

The nature center **building, trails, and area** will be closed Thanksgiving Day.

Conservation Kids—Oh, Deer!

November 22 • Tuesday • 6:30–7:45 PM

Registration begins November 1 (ages 7–12)

Oh, “deer”! What can the matter be? Too many deer in the woods. Learn about the history of deer in Missouri, a little deer biology, and why healthy deer populations require management. Please, no younger siblings and only one adult per group of kids.

Discovery Table—Oh, Deer!

November 25 • Friday • 1–4 PM

No registration required

White-tailed deer are much-loved animals of great beauty that are commonly seen on the nature center trails. Stop by anytime to learn more about these amazing mammals and make a craft to take home.

Ozark Whittlers & Woodcarvers

November 26 • Saturday • 1–4 PM

No registration required

Stop by to see members of the Ozark Whittlers & Woodcarvers transform wood into treasures.

Badge Bonanza

November 29 • Tuesday • 6:30–8 PM

Registration begins November 1 (ages 7–adult)

Attention all scouting and youth organizations! You won’t want to miss this program on birds that will help you earn nature badges. We’ll play some games and do fun activities that will help you learn about bird migration and identification. Program is also open to the public.

Temporary Exhibits

November

Works In Progress

Nature Photography by Noppadol Paothong

December

Ice—Nature’s Ephemeral Art

Photography by Roy Gold

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/springfield

Nature Center Closings: The nature center **building, trails, and area** will be closed on Thanksgiving, Christmas, and New Year's Days.

The nature center **trails** will be **closed Saturday, December 10**, through **Monday, December 12**, for a managed archery deer hunt. Healthy deer populations require management. Missouri offers numerous managed deer hunts from mid-September through January. One of the hunts this year will be held at the nature center. Long term, the effects of too many deer include stress on deer, higher disease rate, and significant habitat destruction which affects all wildlife. The balance between a healthy habitat for deer and other wildlife and continued deer viewing opportunities is the goal.

December Events

Nature And The Arts An Evening With Tim Ernst

December 2 • Friday • 5–6 PM OR 7–8 PM
Registration begins November 15 (ages 12–adult)

Before or after taking a stroll outdoors, enjoy the scenic photography of nationally known nature photographer Tim Ernst as he returns to share images set to music from his latest publication—*Arkansas In My Own Backyard*. See stunning images made within a 12-mile radius of the Ernst's remote Cloudland wilderness home in northwest Arkansas. You'll be inspired to explore the natural beauty of the Buffalo National River area, the Ozarks, and areas beyond. Tim will be available for a book signing from 6–7 PM and 8–9 PM. For more information, visit Tim's website at [<TimErnst.com>](http://TimErnst.com).

Evening Stroll

December 2 • Friday • 6–9 PM
No registration required (all ages)

You've seen the fancy flashing light displays all over town—now come out for a quieter, old-fashioned holiday evening. Enjoy a crackling fire, sip hot chocolate, and browse through the gift shop and exhibits when you come indoors to get warm. The trails will be open and patrolled, so bring a flashlight and a walking partner because you're on your own.

Conservation TEENS—Shooting 22s

December 3 • Saturday • 9 AM–12 NOON
Registration begins November 15 (ages 12–17)
Learn how to shoot 22-caliber rifles at the Andy Dalton Shooting Range at the Bois D'Arc Conservation Area. After classroom discussion, it is out to the range to practice and test your skills. So whether you're a beginner or an expert shot, **meet at the range** and enjoy the fun! Refreshments will be provided.

Dutch Oven Cooking 101

December 8 • Thursday • 9 AM–12 NOON
Registration begins December 1 (ages 10–adult)
Learn the basics of Dutch oven cooking to amaze your family and friends with delicious, easy-to-cook meals. After a brief session on basics, the rest of the workshop will involve hands-on learning and tasting.

Conservation Kids Holiday Crafts For Kids

December 8 • Thursday • 6–8 PM
Registration begins December 1 (ages 7–12)

Hey, kids! Here's your chance to make some presents out of natural and recycled items just in time for the holidays. Drop by anytime and plan to spend at least an hour during this special meeting date and time. Bring a sack to carry your crafts and lots of creativity. All other items will be provided. Please, no younger siblings and only one adult per group of kids.

Natural Holiday Crafts

December 10 • Saturday • 10 AM–3 PM
No registration required (all ages)
Stop by anytime to make some simple holiday crafts from natural and recycled materials. We'll supply the materials, kids bring the creativity, and parents provide the guidance.

Story Time With Ms. Ladybug

December 14 • Wednesday • 11–11:30 AM
No registration required (ages 2–6)
Join Volunteer Naturalist Joyce Tolliver as she reads a nature story and shares activities with your 2–6 year olds. Please, no organized groups.

Conservation TEENS Year-End Review

December 15 • Thursday • 7–8 PM
Registration begins December 1 (ages 12–17)
Join us as we celebrate the close of another successful year of Conservation TEENS. After viewing photos of the year's outings, we'll enjoy refreshments and vote on possible outings for 2017. Teens ages 12–17 and their families are welcome to attend.

Take A Hike

December 17 • Saturday • 8:15 AM–5 PM
Registration begins December 1 (ages 18–adult)
Stockton State Park offers a scenic view of the lake from its trails. Trek a portion of the trails with Volunteer Naturalist Mike Mihalik. Meet at the nature center and carpool. Bring a sack lunch and water and wear comfortable hiking shoes. **Hike is five miles and rated moderate in difficulty.**

Winter Bird Walk

December 27 • Tuesday • 11 AM–12 NOON
No registration required (ages 7–adult)
Dress warmly and join us for a winter bird walk. Bring binoculars and a bird field guide if you have them.

Winter Wildlife Survivors Puppet Show

December 28 • Wednesday • 11–11:30 AM OR 1–1:30 PM
Registration begins December 1 (all ages)

The question is: How do animals spend the winter? The answer is: Store, snore, or soar. Join ace reporter "Calvin the Catfish" and friends to get more of the scoop on surviving winter.

Animal Bingo

December 29 • Thursday • 1–2 PM
No registration required (ages 5–adult)
Put your nature knowledge to work as you and your family participate in *Animal Bingo*. Learn new facts and win prizes.

Missouri Snakes

December 30 • Friday • 1–2 PM
No registration required (ages 5–adult)
Sometimes they startle us, but snakes always fascinate us. Learn about this often misunderstood reptile, see snakes up close, and even touch one!

Programs are 45-minutes in length **Little Acorns**

Registration begins December 1 (ages 3–6)

Winter Woodpeckers

December 7 • Wednesday • 10 AM OR 11:15 AM
Many birds fly south seeking warmer weather in the winter, but not Missouri's wonderful woodpeckers. Fly on in to learn more about these "hardheaded" birds and how to attract them to your yard during the cold winter months.

Wildlife In Winter

December 16 • Friday • 10 AM OR 11:15 AM
December 17 • Saturday • 11 AM
What happens to wild animals in winter? Some hibernate, of course, but we'll learn other "tricks" animals use to survive these frigid months.

Shepherd of the Hills Fish Hatchery and Conservation Center

483 Hatchery Road, Branson, MO 65616 • mdc.mo.gov/shepherd



The Fish Hatchery and Conservation Center is located on 221 acres in Branson off Highway 165 next to Table Rock Dam. Outdoors, visitors will experience an active fish hatchery with 700,000 rainbow and brown trout in 30 pools with opportunities to feed the fish. Indoors, enjoy a 3,500 gallon aquarium and hands-on nature exhibits and purchase hunting and fishing permits. The area also features four hiking trails, a picnic area, a boat ramp, and access to Lake Taneycomo.

FACILITY HOURS:

June–July–August:

Sunday–Saturday: 9 AM–6 PM

Remainder of Year

Sunday–Saturday: 9 AM–5 PM

Closed all state holidays

AREA AND TRAIL HOURS:

4 AM–10 PM

The area is open to fishing 24 hours daily, but special permits and regulations do apply. Check the current fishing regulations or call for details.

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-334-4865**, Ext. 0, to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

FISHING LAKE TANEYCOMO:

Before fishing on Lake Taneycomo, become familiar with the regulations and restrictions. Come by for a free brochure of the entire lake including fishing accesses. For specific details about trout fishing here and across the state, visit short.mdc.mo.gov/Zkh.

November and December Events

Bird Feeder Workshop

November 19 • Saturday • 2–3:30 PM

Registration required (families, all ages)

Here is a great way for the whole family to create a bird feeder to enjoy all year round. In addition to making the feeder, you will also learn what is the best seed to put in it and what challenges you might encounter. Each family will make one wooden bird feeder to take home. Bring a hammer.

Nature Ornaments

December 17 • Saturday • 10–11:30 AM

Registration required (families, ages 5 and up)

Here is your chance to make unique ornaments for windows, holiday trees, or indoor decorations. There will be a variety of nature-related ornaments for each person to make. These will include clear globes with fishing lures, snowflake animals, origami butterflies, and snowy owls made from pine cones. This activity will help you to find creative ways to enjoy nature throughout the holidays.

Frost Flowers



Look for frost flowers from early November through mid-December.

One of the unique surprises of our early winters in the Ozarks is looking for frost flowers. These unusual, small white pieces of curved ice can be found along roadsides, fields, and forest floors across southwest Missouri. Only a handful of plants create frost flowers. Most frost flowers are found on the stems of dittany (*Cunila organoides*) and white crownbeard (*Verbesina virginica*) which have the ability to store excess water in their roots. Under

normal conditions, water in the roots of these plants escapes as water vapor from the lower stem at night. Once the temperature drops below freezing, the water vapor freezes as sheets of ice in the air and bends into curved flower-like petals. The name frost flower is a bit misleading because it is neither frost nor a flower, yet the name is a good description.

Look for frost flowers in your area in early November through mid-December. Sometimes you may find frost flowers as late as January. Once you find them, don't be surprised to see dozens of them. They are often so white in color that they could be mistaken for facial tissues strewn on the forest floor. Take the time to enjoy their amazing texture and shapes before the sun reaches them. Even on days that don't get above freezing, the sunlight will often melt them. This means that you have the challenge of only a couple of hours in the morning to find and enjoy them. Share these amazing winter jewels with your family and friends so that everyone can enjoy more of our wonderful Ozarks forests.

—John Miller, Interpretive Center Manager

Holiday Closings: Veterans, Thanksgiving, Christmas, and New Year's Days

Southwest Regional Office

2630 N. Mayfair Avenue, Springfield, MO 65803 • mdc.mo.gov/southwest

Springfield's Urban Deer Management *Managing For Healthy Populations*

One of the Missouri Department of Conservation's (MDC) greatest success stories is the restoration of the white-tailed deer in Missouri. However, unfortunate spinoffs of this great success story are the problems seen by cities and wildlife managers as deer populations in some urban areas escalate to numbers that are often more than double or triple the number recommended for a healthy deer population in an urban ecosystem.

Springfield is no stranger to the challenge of managing deer. It is currently striving to attain a balance that will allow for continued wildlife viewing opportunities while decreasing human-deer conflicts such as deer-vehicle collisions and deer browsing problems. Springfield's urban deer management is multifaceted and one management tool currently used is archery hunting.

On November 10, 2014, the City of Springfield passed an ordinance allowing archery methods to harvest white-tailed deer on private property within the city limits. Regulations under this ordinance include hunting on properties or a combination of adjacent properties of two acres or more; hunters are required, if not strictly hunting on their own property, to have written permission from all property owners while hunting; hunters must hunt from an elevated location of 10 feet or higher; and no arrows may be discharged within 150 yards of any church and/or school property line or outdoor playground. MDC distributes surveys to all Greene County hunters with a Springfield address in an attempt to determine the deer harvest under the bowhunting ordinance.

In conjunction with the bowhunting ordinance, MDC and Springfield City Utilities (CU) have been working together since 2010 to conduct two managed archery deer hunts every year on CU property—Fellows Lake (2009–present) and Lake Springfield (2011–present). All hunters are drawn through MDC's managed hunt system and are required to attend a pre-hunt orientation where hunters are briefed on each hunt's specific regulations and view bowhunting safety videos. Archers are allowed to harvest two deer (one antlerless and one antlered) on Fellows Lake and three deer (two antlerless and one antlered) on Lake Springfield. Both hunts follow an "earn a buck" system, which means an antlerless deer has to be harvested before an antlered.

Providing further assistance to help reduce Springfield's urban deer numbers will be a managed archery hunt at the Springfield Conservation Nature Center (SCNC) December 10–12. This hunt is consistent with other MDC nature centers in the state, all of which hold managed hunts to help control deer numbers. The SCNC hunt will allow six archery hunters to harvest three deer each (two antlerless and one antlered) and will use the "earn a buck" system. All hunters will be required to attend a pre-hunt orientation which will be conducted similarly to the Fellows Lake and Lake Springfield orientations. The nature center will continue with normal winter business hours, except that all trails will be closed for the duration of the three-day hunt. It is hoped the city's deer population—with the combination of the SCNC managed archery hunt, the adjacent Lake Springfield managed archery hunt, and the bowhunting ordinance—will eventually reach numbers that are beneficial to the health of the deer and the ecosystem while decreasing human-deer conflicts.

—Ashley Schnake, Urban Wildlife Biologist



The Southwest Regional Office is conveniently located just west of the intersection of US-65 and Kearney in Springfield. The public may obtain information on land management, nuisance wildlife, educational opportunities, river and pond management, and more, as well as purchase hunting and fishing permits and obtain area brochures for Conservation Department areas.

HOURS: Monday–Friday: 8 AM–5 PM
Closed all state holidays

PHONE: 417-895-6880

Hunter Education Sessions

Knowledge (Classroom) Sessions

Location

Springfield Conservation Nature Center November 4 • Friday • 6–10 PM
December 9 • Friday • 6–10 PM

Skills Sessions

Location

Date/Time

Springfield Conservation Nature Center November 5 • Saturday • 8 AM–12 NOON OR 1–5 PM
December 10 • Saturday • 8 AM–12 NOON OR 1–5 PM
Andy Dalton Shooting Range November 5 • Saturday • 8 AM–12 NOON
December 3 • Saturday • 8 AM–12 NOON
Wildcat Glades Conservation & Audubon Center November 7 • Monday • 6–10 PM
December 7 • Wednesday • 6–10 PM

Visit short.mdc.mo.gov/ZkY to register for these sessions and to check for session changes and/or other locations.

Reminder

Hunter-education certification has two parts: knowledge and skills. You must complete and pass **BOTH** sessions to earn your certificate. For more information on Hunter Education, contact your local Missouri Department of Conservation office or visit the Conservation Department website at short.mdc.mo.gov/Zkg.

20% Off Special

More than 100 delicious, kitchen-tested recipes high-light Missouri's game, fish, nuts, fruits, and mushrooms.



\$12

Featured Publication for November and December

Available at the Springfield Conservation Nature Center and Southwest Regional Office.



Connect to
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Text the words
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Subscribers will receive four to eight texts a month to remind you of free events at the Nature Center.

Nature Connections Newsletter

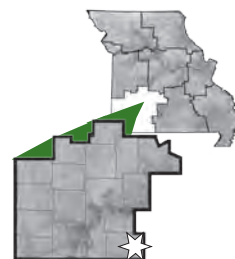
To begin receiving the newsletter by mail, call any of the offices listed in the newsletter and leave your name and address.

To begin receiving the newsletter electronically by email, go online to mdc.mo.gov/govdelivery, enter your email and subscribe to "News, Events and Newsletters - Southwest Region."

Conservation Showcase:

Drury-Mincy Conservation Unit

LOCATION: Bordering Bull Shoals Reservoir in Taney County, this 5,599-acre area is a mix of woodlands, glade, and riparian corridors. From Branson, take Missouri Highway 76 east 5 miles, then take Taney County Highway J south 6 miles, then Gunnison Road right 0.75 mile. The area is in 2 tracts—the 3,400-acre Drury tract and the 2,199-acre Mincy Tract. An unstaffed archery range is located on the Mincy portion of the area. In addition to offering a variety of public use opportunities, the area is the site of Missouri State University's Bull Shoals Field Station (located on the Drury tract). Besides offering classes to students from Missouri State University and a number of other regional universities, the field station also collects and catalogues a variety of meteorological and environmental data that pertains to that area.



HISTORY: The area is named for early landowner and local businessman Frank Drury and the nearby settlement of Mincy. The area was purchased by a private landowner in 1929 who worked with the Missouri Department of Conservation (MDC) to increase deer numbers. MDC leased the land in 1939 and purchased it in 1987. While it was being leased, MDC used it as a wildlife refuge. From 1939 to 1959, Drury-Mincy deer were successfully used to restore white-tailed deer populations statewide. The area also provided 300 turkeys for statewide restoration projects during the 1960s.

NATURE VIEWING: Glades and post oak savannas dominate the area's rolling hills. Mincy, Fox, and Bee Creeks meander through stands of wild cane. Because of this diverse habitat, a variety of wildlife can be seen at Drury-Mincy. Deer, turkey, and a diversity of songbirds and migratory birds are among the wildlife that can be seen. In early spring, a number of woodland wildflower species can be found in the forested areas before the tree canopies leaf out. Binoculars and some type of bird identification literature are helpful to have on a trip to Drury-Mincy.

HUNTING AND FISHING: Hunting is allowed under statewide regulations. Archery is the only method for deer hunting that is allowed at the area. Furbearer trapping is permitted by Special Use Permit only. Fishing and frogging are allowed under statewide regulations.

HIKING AND CAMPING: Hiking is permitted on interior roads and trails. Two popular trails are the 1.5-miles Bear Cave Trail and the 0.5-mile Thurman's Sink Trail. A primitive camping area is located on the Mincy Tract. This site has 8 fire rings, 8 picnic tables, and a privy. Campers are limited to 14 consecutive days in a 30-day period. Groups of 10 or more campers are required to obtain a Special Use Permit.

More information about this area can be found at mdc.mo.gov or by calling the MDC Ozark Regional Office in West Plains at 417-256-7161.

—Francis Skalicky, Media Specialist